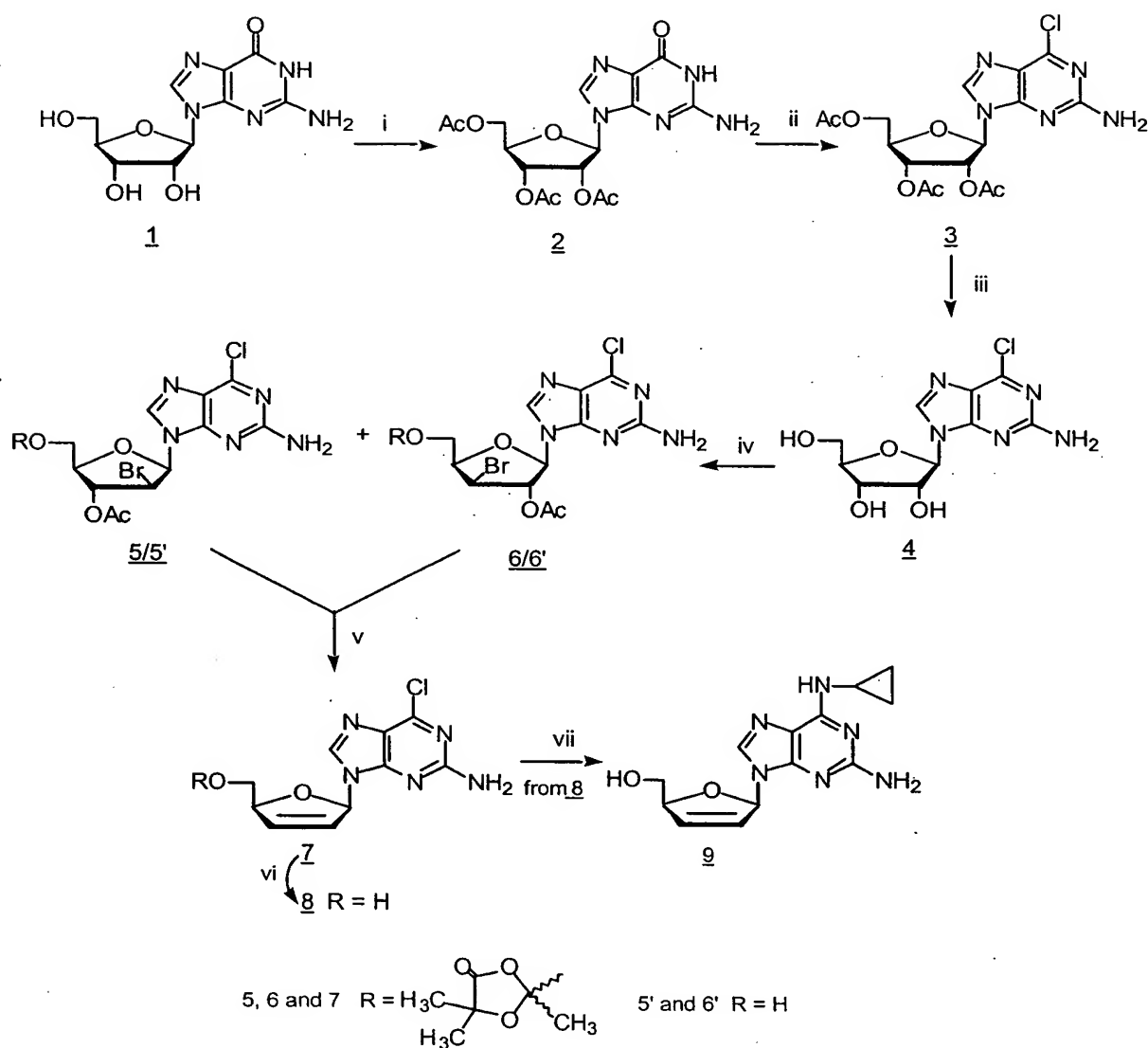


FIGURE 1

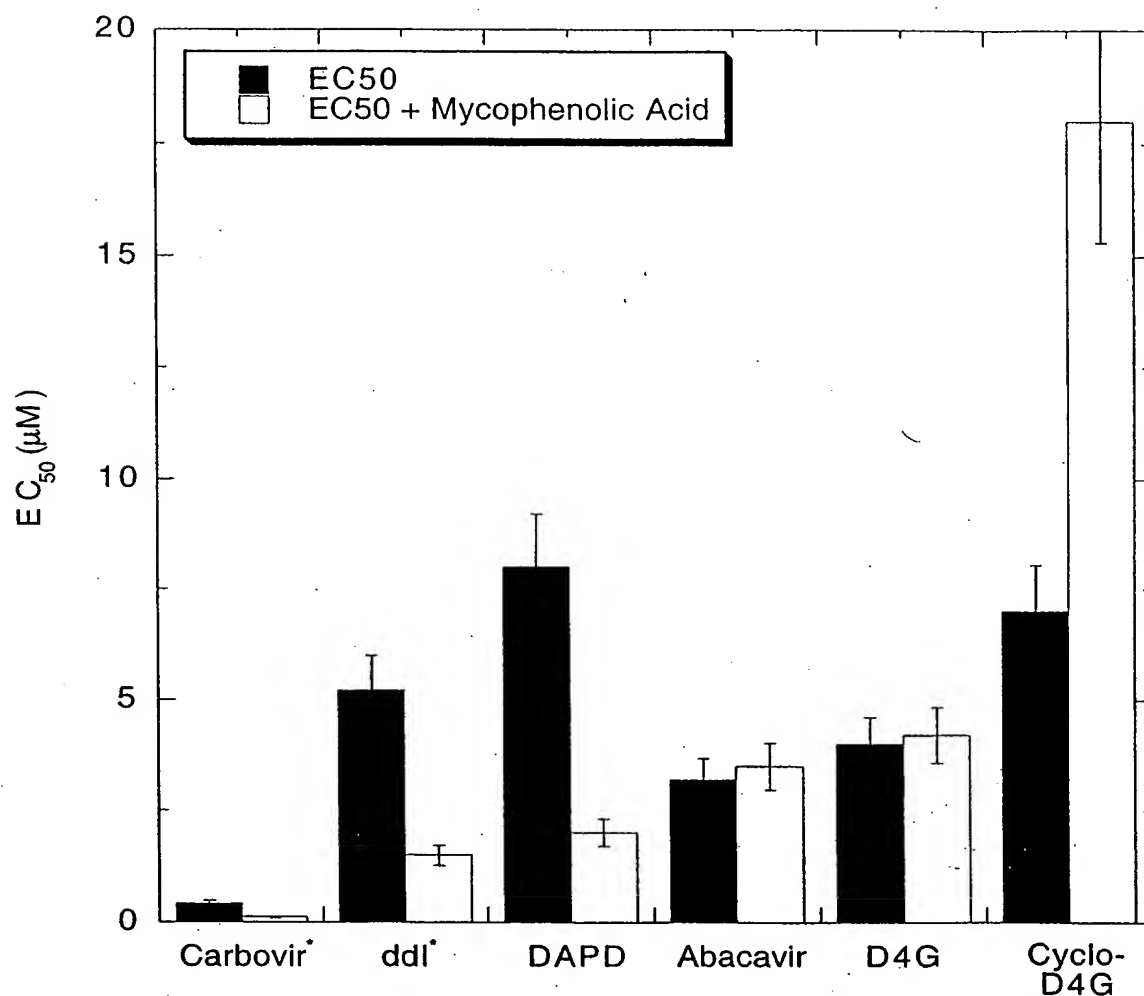
Synthesis of D4G Prodrug



i. $\text{Ac}_2\text{O}/\text{Pyridine}/\text{DMF}$ 75° 4h; ii. $\text{POCl}_3/\text{C}_6\text{H}_5\text{NEt}_2/(\text{n-Bu})_4\text{N}^+\text{Cl}^-/\text{CH}_3\text{CN}$, 100° , 10min; iii. $\text{NH}_3/\text{CH}_3\text{OH}$, r.t., 6h; iv. $(\text{CH}_3)_2\text{C}(\text{OAc})\text{COBr}/\text{CH}_3\text{CN}$, r.t., 3 h; v. Zn/DMF , r.t., 40min; vi. $\text{K}_2\text{CO}_3/\text{CH}_3\text{OH}/\text{H}_2\text{O}$, r.t., 2h; vii. Cyclopropylamine/ $\text{C}_2\text{H}_5\text{OH}$, r.t..

FIGURE 2

Effects of Mycophenolic Acid on Anti-HIV Activity of Nucleosides



*Compounds are more active than what is normally observed because experiments were done using slowly dividing cells. Normally observed EC_{50} values in the absence of mycophenolic acid for Carbovir and ddI are 1.2 μM and 20 μM respectively.

FIGURE 3

Comparison of Synergy Between Abacavir/3TC and cyclo D4G/3TC

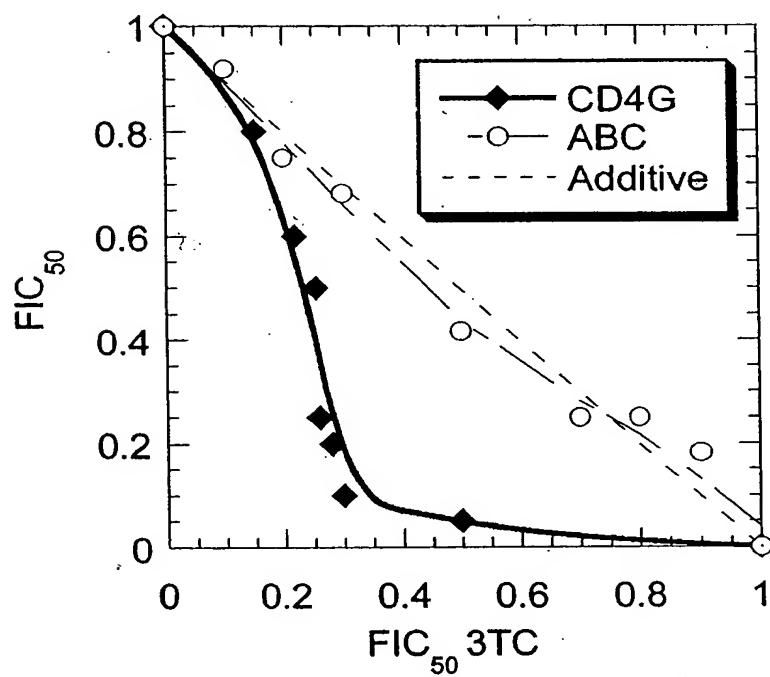


FIGURE 4

Effects of FDA Approved Nucleosides on the anti-HIV Activity of Cyclo D4G

